S-Carb 43L

Kyocera SGS Precision Tools Case Study

INDUSTRY

AUTOMOTIVE

MATERIAL

Glass Filled Nylon

PRODUCT

KSPT S-Carb

APPLICATION

Milling

COMPETITOR

3-Flute Extended Reach End Mill

COOLANT

CimCool

TOOL INFORMATION

.500 DIA /.625” LOC / 4” OAL

kyocera-sgstool.com

CARB® Solid Carbide End Mills for Aluminum

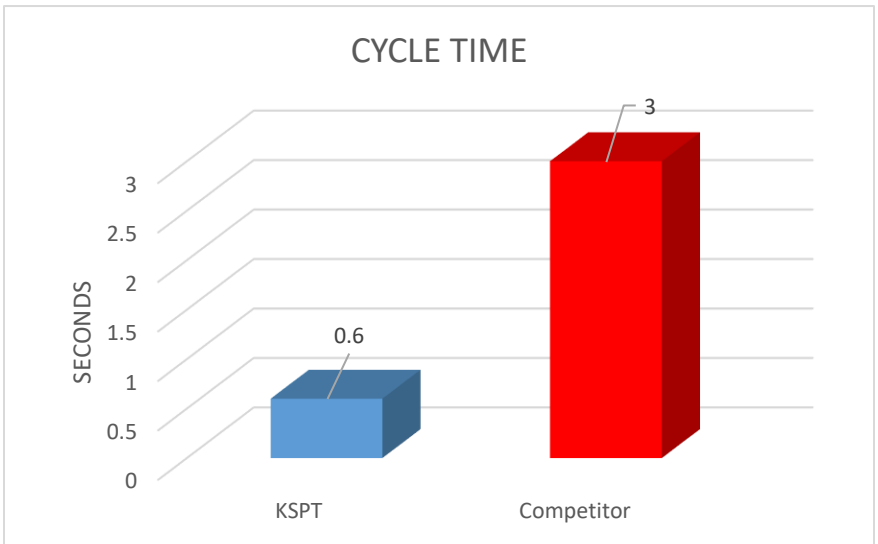
GOALS

The goals of this study were to significantly reduce job cost through a reduction in cycle time and increased tool efficiency.

STRATEGY

KSPT approached this job with a 3 flute S-Carb extended reach end mill. KSPT’s S-Carb exhibits superior balance in a high-speed environment. While also reducing vibration and increasing plunging capabilities compared to traditional 3-flute designs.

	KSPT	COMPETITOR
TOOL DIAMETER	.500”	.500”
SPEED	3275 RPM	1960 RPM
FEED	1725 FPM	200 FPM
RADIAL CUT (AE)	.010"	.010"
AXIAL CUT (AP)	.625"	.625"
CYCLE TIME	46.2 seconds	8:36



KSPT’s S-Carb reduced the total cycle time by 80%!

RESULTS

The overall findings of this study indicate that not only does KSPT's S-Carb have a lower list price, our tools were able to reduce the total cycle time by 80%. This was largely due to the 40% increase in RPM and the 88% increase in feed rate. With the increase in speed and feed rates the total machining time was reduced by 88%. All those factors resulted in a **reduction** in machining cost of over $63,000, and a **Total Job Savings of $180,320.97!!!**